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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/838,028	04/19/2001	Peter Lind	00125US2	3730
26657	7590 12/26/2002			
		TZ MACKIEWICZ & NORRIS LI	EXAMINER	
	: SUZANNE E. MILLI Y PLACE, 46TH FLO	ULM, JOHN D		
	HA, PA 19103	[		
	<b>,</b>		ART UNIT	PAPER NUMBER
			1646	
			DATE MAILED: 12/26/2002	14

Please find below and/or attached an Office communication concerning this application or proceeding.



## Office Action Summary

Application No. 09/838,028

John Ulm

Applicant(s)

Examiner

Art Unit

1646

Lind et al.

	The MAILING DATE of this communication appears on the cover sheet with the correspondence address					
	for Reply					
THE	ORTENED STATUTORY PERIOD FOR REPLY IS SET MAILING DATE OF THIS COMMUNICATION. ions of time may be available under the provisions of 37 CFR 1.136 (e). In					
- If the p - If NO p - Failure - Any re	date of this communication. beriod for reply specified above is less than thirty (30) days, a reply within the beriod for reply is specified above, the maximum statutory period will apply a to reply within the set or extended period for reply will, by statute, cause the ply received by the Office later than three months after the mailing date of the patent term adjustment. See 37 CFR 1.704(b).	and will expire SIX (6) I he application to becom	MONTHS f	from the mailing date of this communication. ONED (35 U.S.C. § 133).		
Status						
1) 💢	Responsive to communication(s) filed on <u>Jan 22, 2</u>	2002		·		
2a) 🗌	This action is <b>FINAL</b> . 2b) 💢 This act	tion is non-final.	ı			
3) 🗆	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11; 453 O.G. 213.					
	tion of Claims					
4) X	Claim(s) <u>1-29, 31, and 34-81</u>			is/are pending in the application.		
4	a) Of the above, claim(s) <u>1-29 and 36-81</u>			<del></del>		
5) 🗆	Claim(s)	-		is/are allowed.		
6) 💢	Claim(s) 31, 34, and 35			is/are rejected.		
7) 🗌	Claim(s)			is/are objected to.		
8) 🗆	8) Claims are subject to restriction and/or election requirement.					
Application Papers						
9) The specification is objected to by the Examiner.						
10) ☐ The drawing(s) filed on is/are a) ☐ accepted or b) ☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
11)	The proposed drawing correction filed on			approved b) $\square$ disapproved by the Examiner.		
If approved, corrected drawings are required in reply to this Office action.						
12) $\square$ The oath or declaration is objected to by the Examiner.						
	under 35 U.S.C. §§ 119 and 120					
13) Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
	a) All b) Some* c) None of:					
	1. Certified copies of the priority documents have been received.					
	2. Certified copies of the priority documents have been received in Application No					
<ul> <li>3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>*See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
14)						
a) [	a) The translation of the foreign language provisional application has been received.					
15) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.						
Attachm						
	tice of References Cited (PTO-892)	4) Interview Sum	amary (PTC	0-413) Paper No(s)		
	tice of Draftsperson's Patent Drawing Review (PTO-948)	5) Notice of Informal Patent Application (PTO-152)				
3) X Inf	ormation Disclosure Statement(s) (PTO-1449) Paper No(s). 7, 9, 10	6)				

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- 1) Claims 1 to 29, 31 and 34 to 81 are pending in the instant application. Claims 31, 34 and 35 have been amended and claims 30, 32 and 33 have been canceled as requested by Applicant in Paper Number 13, filed 22 October of 2002.
- 2) Claims 1 to 29 and 36 to 81 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 12. The traversal is on the ground(s) that a search of the different inventions in a single application would pose no undue burden. This is not found persuasive because M.P.E.P. 803 states that:
  - "For purposes of the initial requirement, a serious burden on the examiner may be prima facie shown if the examiner shows by appropriate explanation either separate classification, separate status in the art, or a different field of search as defined in MPEP § 808.02. That prima facie showing may be rebutted by appropriate showings or evidence by the applicant."

Serious burden was shown in the original requirement by the separate classification and separate status in the art of the different inventions.

The requirement is still deemed proper and is therefore made FINAL.

Claims 31, 34 and 35 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. A properly dependant claim can not conceivably be infringed without infringing any of the claims from which it depends. Claims 31,

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34 and 35 can not properly depend from claim 1 because they can be infringed by a polypeptide composition which does not infringe the isolated nucleic acid molecule of claim 1. See M.P.E.P. 608.01(n)III.

4) Applicant is advised that should claim 31 be found allowable, claim 34 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. Claim 34 is of the same as claim 31 because claim 34 depends from claim 31 without further limiting the subject matter of claim 31. Claim 31 requires the polypeptide recited therein to comprise the entire amino acid sequence of either SEQ ID NO:2 or 4. Therefore, any polypeptide which meets all of the limitations of claim 31 would inherently meet the additional limitation of claim 34, which further requires the claimed polypeptide to comprise at least 10 consecutive amino acids from SEQ ID NO:2 or 4. See MPEP § 706.03(k).

## 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5) Claims 31, 34 and 35 are rejected under 35 U.S.C. § 101 because they are drawn to an invention with no apparent or disclosed specific and substantial credible utility. The instant application has provided a description of an isolated DNA encoding a protein and the protein

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encoded thereby. The instant application does not disclose a specific biological role for this protein or its significance to a particular disease, disorder of physiological process which one would wish to manipulate for a desired clinical effect.

It is clear from the instant specification that the receptor protein identified therein as "Con-218" is what is termed an "orphan receptor" in the art. This is a protein whose cDNA has been isolated because of its similarity to known proteins. There is little doubt that, after complete characterization, this protein may be found to have a specific and substantial credible utility. This further characterization, however, is part of the act of invention and until it has been undertaken Applicant's claimed invention is incomplete. Whereas one could readily employ a putative receptor protein of the instant invention in an assay to identify ligands thereto the information obtained thereby would be of little use until one discovers the identity of those physiological processes moderated by that putative receptor. Because the instant specification has failed to credibly identify a physiological process which has been shown to be influenced by the activation or inhibition of a putative receptor protein of the instant invention an artisan would have no way of predicting what effects the administration of that ligand to an organism would have. If one can not predict the effects that the administration of a ligand of the putative receptor of the instant invention is going to have on an organism then it is unclear as to what practical benefit is derived by the public from the identification of that ligand.

The instant situation is directly analogous to that which was addressed in *Brenner v.*Manson, 148 U.S.P.Q. 689 (Sus. Ct, 1966), in which a novel compound which was structurally

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analogous to other compounds which were known to possess anti-cancer activity was alleged to be potentially useful as an anti-tumor agent in the absence of evidence supporting this utility. The court expressed the opinion that all chemical compounds are "useful" to the chemical arts when this term is given its broadest interpretation. However, the court held that this broad interpretation was not the intended definition of "useful" as it appears in 35 U.S.C. § 101, which requires that an invention must have either an immediately obvious or fully disclosed "real world" utility. The court held that:

"The basic quid pro quo contemplated by the Constitution and the Congress for granting a patent monopoly is the benefit derived by the public from an invention with substantial utility", "[u]nless and until a process is refined and developed to this point-where specific benefit exists in currently available form-there is insufficient justification for permitting an applicant to engross what may prove to be a broad field", and "a patent is not a hunting license", "[i]t is not a reward for the search, but compensation for its successful conclusion"

The instant claims are drawn to a protein of as yet undetermined function or biological significance. There is absolutely no evidence of record or any line of reasoning that would support a conclusion the a protein of the instant invention is associated in any way with schizophrenia or the plurality of causally unrelated disorders that are listed on pages 41, 42 and 51 of the instant specification. Until some actual and specific significance can be attributed to the protein identified in the specification as Con-218, or the gene encoding it, the instant invention is incomplete. The protein of the instant invention is a compound known to be structurally analogous to proteins which are known in the art as G protein-coupled receptors. In the absence

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of a knowledge of the natural ligands or biological significance of this protein, there is no immediately obvious <u>patentable</u> use for it. To employ a protein of the instant invention in the identification of substances which inhibit or induce its activity is clearly to use it as the object of further research which has been determined by the courts to be a utility which, alone, does not support patentability. Since the instant specification does not disclose a credible "real world" use for Con-218 then the claimed invention is incomplete and, therefore, does not meet the requirements of 35 U.S.C. § 101 as being useful.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6) Claims 31, 34 and 35 are rejected under 35 U.S.C. § 112, first paragraph, as failing to adequately teach how to use the instant invention for those reasons given above with regard to the rejection of these claims under 35 U.S.C. § 101.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

- (e) the invention was described in-
- (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or
- (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

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35 U.S.C. § 119(e) states that:

An application for patent filed under section 111(a) or section 363 of this title for an invention disclosed in the manner provided by the first paragraph of section 112 of this title in a provisional application filed under section 111(b) of this title, by an inventor or inventors named in the provisional application, shall have the same effect, as to such invention, as though filed on the date of the provisional application filed under section 111(b) of this title, if the application for patent filed under section 111(a) or section 363 of this title is filed not later than 12 months after the date on which the provisional application was filed and if it contains or is amended to contain a specific reference to the provisional application.

7) Claims 31, 34 and 35 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by the Gan et al. patent publication (US 2002/0100067 A1). Gan et al. provided a written description of the claimed protein. Applicant is advised that the instant application can only receive benefit under 35 U.S.C. § 119(e) from an earlier application which meets the requirements of 35 U.S.C. § 112, first paragraph, with respect to the now claimed invention. Because the instant application does not meet the requirements of 35 U.S.C. § 112, first paragraph, for those reasons given above and it is a divisional of provisional application Serial Number 60/198,600, the prior application also does not meet those requirements and, therefore, is unavailable under 35 U.S.C. § 119(e).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John D. Ulm whose telephone number is (703) 308-4008. The examiner can normally be reached on Monday through Friday from 9:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yvonne Eyler can be reached at (703) 308-6564.

Official papers filed by fax should be directed to (703) 308-4242 or (703) 872-9306. Official responses under 37 C.F.R. § 1.116 should be directed to (703) 872-9307.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0196.

JOHN ULM PRIMARY EXAMINER GROUP 1800

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